

ABSTRACT

Method for conjoint channel and direction of arrival estimation

Method of estimating the channel and the direction of arrival of a signal transmitted by a transmitter and received by an array of antennae after being propagated along at least one path, comprising, for each path, a first step of estimating phase differences (ξ_t) in the signals received by the different antennae in the array, a second step of estimating the angle of arrival (θ) of the signal as well as the phase rotation (ν) undergone by the signal along the said path from the said phase differences and a third step of estimating the attenuation (α) undergone by the signal along the said path from the estimated values ($\hat{\nu}$, $\hat{\theta}$) of the phase rotation and the angle of arrival.

Fig. 2